

CLAIMS

What is claimed is:

- 1        1. A method for correcting a network address for an object device,  
2 the method comprising:
  - 3            (a) reading, from a record, a recorded network address and a  
4 recorded unique enduring identification for the object device;
  - 5            (b) querying the recorded network address for a returned unique  
6 enduring identification;
  - 7            (c) comparing the returned unique enduring identification with  
8 the recorded unique enduring identification; and,
  - 9            (d) responsive to a mismatch between the returned unique  
10 enduring identification and the recorded unique enduring identification, finding a  
11 current network address for the object device and replacing the recorded  
12 network address with the current network address.
- 1        2. The method of claim 1 wherein querying the recorded network  
2 address for a returned unique enduring identification includes:
  - 3            (a) addressing a unique enduring identification query to the  
4 recorded network address; and,
  - 5            (b) receiving the response to the query.
- 1        3. The method of claim 1 wherein querying the recorded network  
2 address for a returned unique enduring identification includes performing an  
3 SNMP Get call to the recorded network address.
- 1        4. The method of claim 1 wherein finding a current network address  
2 for the object device includes:

3                             (a)     reading, from the record, a recorded hostname for the object  
4 device; and,  
5                             (b)     retrieving the current network address for the recorded  
6 hostname.

1         5.     The method of claim 1 wherein finding a current network address  
2 for the object device includes:

3                             (a)     reading, from the record, a recorded hardware address for  
4 the object device;  
5                             (b)     sending an network multicast request for hardware  
6 addresses;  
7                             (c)     receiving responses to the network multicast for hardware  
8 addresses;  
9                             (d)     searching the responses for a response having a match to  
10 the recorded hardware address; and,  
11                             (e)     extracting the current network address from the response  
12 having a match to the recorded hardware address.

1         6.     The method of claim 5 further including iteratively repeating steps  
2 (b) through (d) until a match to the recorded hardware address is found in the  
3 responses.

1         7.     The method of claim 1 further including iteratively repeating steps  
2 (b) through (d) until a match occurs between the returned unique enduring  
3 identification and the recorded unique enduring identification.

1         8.     A system for correcting a network address for an object device,  
2 the system comprising:  
3                             (a)     a record having a recorded network address and a recorded  
4 unique enduring identification for an object device;

5                             (b)     a reader configured to read, from the record, the recorded  
6 network address and the recorded unique enduring identification for the object  
7 device;

8                             (c)     an interrogator configured to query the recorded network  
9 address for a returned unique enduring identification;

10                          (d)     a comparator configured to compare the returned unique  
11 enduring identification with the recorded unique enduring identification; and,

12                          (e)     a rectifier configured to respond to a mismatch between the  
13 returned unique enduring identification and the recorded unique enduring  
14 identification, by finding a current network address for the object device and  
15 replacing the recorded network address with the current network address.

1                         9.     The system of claim 8 wherein the investigator includes:

2                         (a)     a dispatcher configured to address a unique enduring  
3 identification query to the recorded network address; and,

4                         (b)     a receiver configured to receive the response to the query.

1                         10.    The system of claim 8 wherein the investigator includes a manager  
2 configured to perform an SNMP Get call to the recorded network address.

1                         11.    The system of claim 8 wherein:

2                         (a)     the record further includes a recorded hostname for the  
3 object device;

4                         (b)     the reader is further configured to read, from the record, a  
5 recorded hostname for the object device; and,

6                         (c)     wherein the rectifier includes a retriever configured to  
7 retrieve the current network address for the recorded hostname.

1                         12.    The system of claim 8 wherein:

2                         (a)     the record further includes a recorded hardware address for  
3     the object device;  
4                         (b)     the reader is further configured to read, from the record, a  
5     recorded hardware address for the object device; and,  
6                         (c)     the rectifier includes:  
7                                 (i)     a broadcaster configured to send a network multicast  
8     request for hardware addresses;  
9                                 (ii)    a listener configured to receive responses to the  
10    network multicast for hardware addresses;  
11                                 (iii)   an investigator configured to search the responses for  
12    a response having a match to the recorded hardware address; and  
13                                 (iv)    an extractor configured to extract the current  
14    network address from the response having a match to the recorded hardware  
15    address.

1                         13.    A program storage device readable by a computer, tangibly  
2     embodying a program, applet, or instructions executable by the computer to  
3     perform method steps for correcting a network address for a object device, the  
4     method steps comprising:  
5                         (a)     reading, from a record, a recorded network address and a  
6     recorded unique enduring identification for the object device;  
7                         (b)     querying the recorded network address for a returned unique  
8     enduring identification;  
9                         (c)     comparing the returned unique enduring identification with  
10    the recorded unique enduring identification; and,  
11                         (d)     responsive to a mismatch between the returned unique  
12    enduring identification and the recorded unique enduring identification, finding a  
13    current network address for the object device and replacing the recorded  
14    network address with the current network address.

1           14. The program storage device of claim 13 wherein the method step  
2 of querying the recorded network address for a returned unique enduring  
3 identification includes:

4                 (a) addressing a unique enduring identification query to the  
5 recorded network address; and,  
6                 (b) receiving the response to the query.

1           15. The program storage device of claim 13 wherein the method step  
2 of querying the recorded network address for a returned unique enduring  
3 identification includes performing an SNMP Get call to the recorded network  
4 address.

1           16. The program storage device of claim 13 wherein the method step  
2 of finding a current network address for the object device includes:  
3                 (a) reading, from the record, a recorded hostname for the object  
4 device; and,  
5                 (b) retrieving the current network address for the recorded  
6 hostname.

1           17. The program storage device of claim 13 wherein the method step  
2 of finding a current network address for the object device includes:  
3                 (a) reading, from the record, a recorded hardware address for  
4 the object device;  
5                 (b) sending a network multicast request for hardware  
6 addresses;  
7                 (c) receiving responses to the network multicast for hardware  
8 addresses;  
9                 (d) searching the responses for a response having a match to  
10 the recorded hardware address; and,

11 (e) extracting the current network address from the response  
12 having a match to the recorded hardware address.

1        18. The program storage device of claim 17 wherein the method steps  
2 further included iteratively repeating steps (b) through (d) until a match to the  
3 recorded hardware address is found in the responses.

1           19. The program storage device of claim 13 wherein the method steps  
2 further included iteratively repeating steps (b) through (d) until a match occurs  
3 between the returned unique enduring identification and the recorded unique  
4 enduring identification.